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IBM CORPORATION
INTELLECTUAL PROPERTY LAW DEPT.IQOA/BLDG. 040-3
1701 NORTH STREET
ENDICOTT,, NY 13760

EXAMINER

SMITH, PETER J

ART UNIT	PAPER NUMBER
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2176

DATE MAILED: 10/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/892,399

Applicant(s)

CARRO, FERNANDO INCERTIS

Examiner

Peter J. Smith

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 July 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10, 18-25 and 31-38 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10, 18-25 and 31-38 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>4/25/05, 9/2/05</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is responsive to communications: amendment filed 1/19/2005.
2. Claims 1-10, 18-25, 31-38 are pending in the case. Claims 1, 18, and 31 are independent claims.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. **Claims 1-4, 7, 8, and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Robinson et al. (hereinafter "Robinson"), "A framework for interacting with paper", Eurographics '97, Volume 16, Number 3 – [www.cl.cam.ac.uk/Research/Origami/Origami1997c/index.html], pages 1-9 in view of Musk et al. (hereinafter "Musk"), US 6,148,260 continuation filed 11/8/1996.**

Regarding independent claim 1, Robinson teaches defining a referenced item in an electronic document in sections 3, 4, 4.1, and 4.4. Robinson teaches wherein the electronic document is not derived from the physical document in section 4.1. Robinson describes here that animated documents are created with a fairly conventional WYSIWYG editor. Thus, the electronic document is created with electronic document editing software and thus is not necessarily derived from a physical document. Robinson does disclose further than the electronic document can additionally be derived by scanning conventional printed documents,

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however this is in addition to creating the electronic document via electronic document creation software. Robinson teaches determining the absolute coordinates of the referenced item in sections 3 and 4.4. Robinson teaches defining a link to the physical document in sections 3, 4, 4.1, and 4.4. Robinson teaches encoding the absolute coordinates in the link in sections 3 and 4.4. An electronic document and physical document work in tandem in the DigitalDesk to create and animated document.

Robinson does not teach wherein the referenced item is related to a geographic location or wherein the absolute coordinates include geographic coordinates. Musk does teach a map document which contains reference items related to geographic locations and identified by geographic coordinates. The map facilitates a user search of business services in a particular geographic area.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined Musk into Robinson to have created the claimed invention. It would have been obvious and desirable to have used the map and geographic coordinate teachings of Musk to have improved the enhanced document of Robinson so that the paper document of Robinson would have presented a map in paper form which provided geographic coordinates to reference items on the map to help a user find and locate available business services on the map. Robinson teaches in the last three sentences of section 1 that its system has been re-engineered for more general use. Maps are traditionally composed of paper and thus would have been a good candidate for the general use DigitalDesk system taught by Robinson.

Regarding dependent claim 2, Robinson teaches encoding an address of a second electronic document in the link in sections 3, 4, 4.1, and 4.4. The electronic document paired

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with the paper document contains hybrid links composed of the interactor coordinates and the associated target location stored in the registry to point to other electronic resources such as other electronic documents.

Regarding dependent claim 3, Robinson teaches wherein the address of the second electronic document is a Uniform Resource Locator address of a web server hosting the second electronic document. The registry is a server which maintains the hyperlinked documents and the links between them.

Regarding dependent claim 4, Robinson teaches storing the coordinates in a table in sections 3 and 4.4. The each page representation in the registry maintains the associations between the coordinates and the interactors, or reference items, on the page.

Regarding dependent claim 7, Robinson does not teach wherein the referenced item is related to a geographic location; the absolute coordinates include geographic coordinates; and wherein the physical document includes a map. Musk does teach a map document which contains reference items related to geographic locations and identified by geographic coordinates. The map facilitates a user search of business services in a particular geographic area.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined Musk into Robinson to have created the claimed invention. It would have been obvious and desirable to have used the map and geographic coordinate teachings of Musk to have improved the enhanced document of Robinson so that the paper document of Robinson would have presented a map in paper form which provided geographic coordinates to reference items on the map to help a user find and locate available business

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services on the map. Robinson teaches in the last three sentences of section 1 that its system has been re-engineered for more general use. Maps are traditionally composed of paper and thus would have been a good candidate for the general use DigitalDesk system taught by Robinson.

Regarding dependent claim 8, Robinson teaches wherein the electronic document is a hyper text markup language document and wherein the link uses syntactic conventions of hyper text markup language in the abstract and sections 4, 4.1, and 4.4.

Regarding dependent claim 10, Robinson does not teach wherein the geographic coordinates include longitude and latitude. Musk does teach wherein the geographic coordinates include longitude and latitude in col. 3 lines 42-44. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined Musk into Robinson to have created the claimed invention. It would have been obvious and desirable to have used the longitude and latitude geographic coordinates to have improved Robinson so that the map paper document could have been used and interacted with using the DigitalDesk. Robinson teaches absolute coordinates relating to reference items on the document, but not longitude and latitude geographic coordinates, because Robinson does not specifically discuss a map example. It would have been obvious and desirable to have enhanced a traditional paper map document with the electronic reference information as taught by Robinson and Musk so that a user could have received detailed information about businesses and services available in the area displayed by the map.

5. **Claims 5-6, 9, 18-25, and 31-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Robinson et al. (hereinafter "Robinson"), "A framework for interacting**

with paper”, Eurographics ’97, Volume 16, Number 3 –

[www.cl.cam.ac.uk/Research/Origami/Origami1997c/index.html], pages 1-9 in view of

Musk et al. (hereinafter “Musk”), US 6,148,260 continuation filed 11/8/1996 and Thompson et al. (hereinafter “Thompson”), US 5,986,401 patented 11/16/1999.

Regarding dependent claim 5, Robinson teaches computing camera coordinates from the absolute coordinates of the referenced item in sections 3 and 4.4. Robinson teaches a calibration relationship, the desk being aligned with the physical document, and the calibration relationship being between the absolute coordinates of a selected calibration location and calibration camera coordinates of the selected calibration location on the desk, the selected calibration point having been selected from the electronic document and the desk having been selectively activated at a position corresponding to where the calibration location appears in the physical document in section 4.2. Robinson does not teach computing foil coordinates because Robinson uses a camera location system instead of a touch foil system. However, Robinson does teach the possibility of using a touch foil to identify coordinates instead of a camera in section 5. Thus, Robinson teaches that foil coordinates could have been implemented in place of camera coordinates.

Robinson does not teach wherein the referenced item is related to a geographic location or wherein the absolute coordinates include geographic coordinates. Musk does teach a map document which contains reference items related to geographic locations and identified by geographic coordinates. The map facilitates a user search of business services in a particular geographic area.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined Musk into Robinson to have created the claimed invention. It would have been obvious and desirable to have used the map and geographic coordinate teachings of Musk to have improved the enhanced document of Robinson so that the paper document of Robinson would have presented a map in paper form which provided geographic coordinates to reference items on the map to help a user find and locate available business services on the map. Robinson teaches in the last three sentences of section 1 that its system has been re-engineered for more general use. Maps are traditionally composed of paper and thus would have been a good candidate for the general use DigitalDesk system taught by Robinson.

Robinson does not teach use of an opto-touch foil because Robinson uses a camera-projector system to read input from the user and display feedback to the user. Robinson teaches the consideration of a touch foil alternate position sensing system in section 5. Thompson teaches a transparent organic LED (TOLED) display for presenting feedback to a user in the abstract and fig. 2. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined Thompson and Robinson to have created the claimed invention. It would have been obvious and desirable to have used the touch foil taught by Robinson and the TOLED of Thompson to have improved Robinson so that the position could have been sensed and feedback presented to the user without the user's hand or input pen interfering with either the sight of the input camera or the projection of the feedback projector of Robinson.

Regarding dependent claim 6, Robinson teaches storing camera coordinates and absolute coordinates in table called a page representation in section 3 and 4.4. Robinson does

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not teach storing foil coordinates because Robinson uses a camera location system instead of a touch foil system. However, Robinson does teach the possibility of using a touch foil to identify coordinates instead of a camera in section 5. Thus, Robinson teaches that foil coordinates could have been implemented in place of camera coordinates.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the DigitalDesk system of Robinson to have created the claimed invention using the touch foil teaching of Robinson in section 5. It would have been obvious and desirable to have used a touch foil instead of a camera system as taught in Robinson so that the location tracking would not have been disrupted by visually blocking the line of sight between the camera lens and the stylus accidentally with the users hand or other object.

Regarding dependent claim 9, Robinson does not teach use of an opto-touch foil because Robinson uses a camera-projector system to read input from the user and display feedback to the user. However, Robinson does teach the possibility of using a touch foil to identify coordinates instead of a camera in section 5. Thompson teaches a transparent organic LED (TOLED) display for presenting feedback to a user in the abstract and fig. 2. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined Thompson and Robinson to have created the claimed invention. It would have been obvious and desirable to have used the touch foil teaching of Robinson and the TOLED of Thompson to have improved Robinson so that the position could have been sensed and feedback presented to the user without the user's hand or input pen interfering with either the sight of the input camera or the projection of the feedback projector of Robinson.

Regarding independent claim 18, Robinson teaches calibrating a camera-projector system that is aligned on a physical document in fig. 1 and section 4.3. Robinson teaches wherein the calibrating comprises processing a calibration location comprised by a plurality of locations appearing in the physical document and being referred to in an electronic document in section fig. 2 and section 4.2. Robinson teaches that the electronic document is not derived from the physical document in section 4.1. Robinson describes here that animated documents are created with a fairly conventional WYSIWYG editor. Thus, the electronic document is created with electronic document editing software and thus is not necessarily derived from a physical document. Robinson does disclose further than the electronic document can additionally be derived by scanning conventional printed documents, however this is in addition to creating the electronic document via electronic document creation software.

Robinson teaches wherein each location of the plurality of locations have absolute coordinates, the processing generating a calibration relationship between the absolute coordinates of the calibration location and the calibration camera coordinates of the camera-projector system, the calibration camera coordinates corresponding to where the calibration location appears in the physical document in fig. 2 and sections 4.2 and 5. Robinson teaches for each location of the plurality of locations, computing camera coordinates of the camera-projector system corresponding to where each location appears in the physical document, the computing utilizing the absolute coordinates of each location and the calibration relationship in fig. 2 and sections 4.2 and 5.

Robinson does not teach wherein the absolute coordinates include geographic coordinates. Musk does teach a map document which contains reference items related to

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geographic locations and identified by geographic coordinates. The map facilitates a user search of business services in a particular geographic area. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined Musk into Robinson to have created the claimed invention. It would have been obvious and desirable to have used the map and geographic coordinate teachings of Musk to have improved the enhanced document of Robinson so that the paper document of Robinson would have presented a map in paper form which provided geographic coordinates to reference items on the map to help a user find and locate available business services on the map. Robinson teaches in the last three sentences of section 1 that its system has been re-engineered for more general use. Maps are traditionally composed of paper and thus would have been a good candidate for the general use DigitalDesk system taught by Robinson.

Robinson does not teach use of an opto-touch foil because Robinson uses a camera-projector system to read input from the user and display feedback to the user. Robinson teaches the consideration of a touch foil alternate position sensing system in section 5. Thompson teaches a transparent organic LED (TOLED) display for presenting feedback to a user in the abstract and fig. 2. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined Thompson and Robinson to have created the claimed invention. It would have been obvious and desirable to have used the touch foil taught by Robinson and the TOLED of Thompson to have improved Robinson so that the position could have been sensed and feedback presented to the user without the user's hand or input pen interfering with either the sight of the input camera or the projection of the feedback projector of Robinson.

Regarding dependent claim 19, Robinson teaches storing an identifier of each location, the absolute coordinates of each location, and the camera coordinates of each location in a table in sections 3 and 4.4. The each page representation in the registry maintains the associations between the coordinates and the interactors, or reference items, on the page. Robinson teaches storing camera coordinates in table called a page representation in section 3 and 4.4. Robinson does not teach storing foil coordinates because Robinson uses a camera location system instead of a touch foil system. Robinson teaches the consideration of a touch foil alternate position sensing system in section 5. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined the touch foil teaching of Robinson into the DigitalDesk system of Robinson to have created the claimed invention. It would have been obvious and desirable to have used a touch foil instead of a camera system as taught in Robinson so that the location tracking would not have been disrupted by visually blocking the line of sight between the camera lens and the stylus accidentally with the users hand or other object.

Regarding dependent claim 20, Robinson teaches sending coordinates to the projector that illuminates a corresponding position on the physical document responsive to the projector coordinates. Robinson does not teach use foil coordinates or an opto-touch foil because Robinson uses a camera-projector system to read input from the user and display feedback to the user. Robinson teaches the consideration of a touch foil alternate position sensing system in section 5. Thompson teaches a transparent organic LED (TOLED) display for presenting feedback to a user in the abstract and fig. 2. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined the teachings of Thompson and Robinson to have created the claimed invention. It would have been obvious and desirable to

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have used the touch foil taught by Robinson and the TOLED of Thompson to have improved Robinson so that the position could have been sensed and feedback presented to the user without the user's hand or input pen interfering with either the sight of the input camera or the projection of the feedback projector of Robinson.

Regarding dependent claim 21, Robinson teaches responsive to a first location of the plurality of locations being selected in the electronic document, sending the coordinates of the first location to the camera-projector system to cause an animation, which could be a blinking of light, at a first position upon the DigitalDesk corresponding to where the first location appears in the physical document in sections 3, 4.3, and 5.

Regarding dependent claim 22, Robinson teaches storing an address of a second electronic document in the table in sections 3 and 4.4.

Regarding dependent claim 23, Robinson teaches wherein the address of the second electronic document is a Uniform Resource Locator address of a web server hosting the second electronic document in sections 3 and 4.4.

Regarding dependent claims 24, Robinson does not teach use of an opto-touch foil because Robinson uses a camera-projector system to read input from the user and display feedback to the user. Robinson teaches the consideration of a touch foil alternate position sensing system in section 5. Thompson teaches a transparent organic LED (TOLED) display for presenting feedback to a user in the abstract and fig. 2. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined the teachings of Thompson and Robinson to have created the claimed invention. It would have been obvious and desirable to have used the touch foil teaching of Robinson and the TOLED of Thompson to have

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improved Robinson so that the position could have been sensed and feedback presented to the user without the user's hand or input pen interfering with either the sight of the input camera or the projection of the feedback projector of Robinson.

Regarding dependent claim 25, Robinson teaches responsive to the DigitalDesk being activated at a first position corresponding to where a first location of the plurality of locations appears in the physical document, causing an animation, which could be a blinking of light, at the first position and highlighting the first position in the electronic document in sections 3, 4.3, and 5.

Regarding independent claim 31, Robinson teaches calibrating a camera-projector system that is aligned on a physical document in fig. 1 and section 4.3. Robinson teaches wherein the calibrating comprises processing a calibration location comprised by a plurality of locations appearing in the physical document and being referred to in an electronic document in section fig. 2 and section 4.2. Robinson teaches that the electronic document is not derived from the physical document in section 4.1. Robinson describes here that animated documents are created with a fairly conventional WYSIWYG editor. Thus, the electronic document is created with electronic document editing software and thus is not necessarily derived from a physical document. Robinson does disclose further than the electronic document can additionally be derived by scanning conventional printed documents, however this is in addition to creating the electronic document via electronic document creation software.

Robinson teaches wherein each location of the plurality of locations have absolute coordinates, the processing generating a calibration relationship between the absolute coordinates of the calibration location and the calibration camera coordinates of the camera-

projector system, the calibration camera coordinates corresponding to where the calibration location appears in the physical document in fig. 2 and sections 4.2 and 5. Robinson teaches for each location of the plurality of locations, computing camera coordinates of the camera-projector system corresponding to where each location appears in the physical document, the computing utilizing the absolute coordinates of each location and the calibration relationship in fig. 2 and sections 4.2 and 5.

Robinson does not teach wherein the absolute coordinates include geographic coordinates. Musk does teach a map document which contains reference items related to geographic locations and identified by geographic coordinates. The map facilitates a user search of business services in a particular geographic area. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined Musk into Robinson to have created the claimed invention. It would have been obvious and desirable to have used the map and geographic coordinate teachings of Musk to have improved the enhanced document of Robinson so that the paper document of Robinson would have presented a map in paper form which provided geographic coordinates to reference items on the map to help a user find and locate available business services on the map. Robinson teaches in the last three sentences of section 1 that its system has been re-engineered for more general use. Maps are traditionally composed of paper and thus would have been a good candidate for the general use DigitalDesk system taught by Robinson.

Robinson does not teach use of an opto-touch foil because Robinson uses a camera-projector system to read input from the user and display feedback to the user. Robinson teaches the consideration of a touch foil alternate position sensing system in section 5. Thompson

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teaches a transparent organic LED (TOLED) display for presenting feedback to a user in the abstract and fig. 2. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined Thompson and Robinson to have created the claimed invention. It would have been obvious and desirable to have used the touch foil taught by Robinson and the TOLED of Thompson to have improved Robinson so that the position could have been sensed and feedback presented to the user without the user's hand or input pen interfering with either the sight of the input camera or the projection of the feedback projector of Robinson.

Regarding dependent claim 32, Robinson teaches storing an identifier of each location, the absolute coordinates of each location, and the camera coordinates of each location in a table in sections 3 and 4.4. The each page representation in the registry maintains the associations between the coordinates and the interactors, or reference items, on the page. Robinson teaches storing camera coordinates in table called a page representation in section 3 and 4.4. Robinson does not teach storing foil coordinates because Robinson uses a camera location system instead of a touch foil system. Robinson teaches the consideration of a touch foil alternate position sensing system in section 5. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined the touch foil teaching of Robinson into the DigitalDesk system of Robinson to have created the claimed invention. It would have been obvious and desirable to have used a touch foil instead of a camera system as taught in Robinson so that the location tracking would not have been disrupted by visually blocking the line of sight between the camera lens and the stylus accidentally with the users hand or other object.

Regarding dependent claim 33, Robinson teaches storing an address of a second electronic document in the table in sections 3 and 4.4.

Regarding dependent claim 34, Robinson teaches wherein the address of the second electronic document is a Uniform Resource Locator address of a web server hosting the second electronic document in sections 3 and 4.4.

Regarding dependent claim 35, Robinson teaches sending coordinates to the projector that illuminates a corresponding position on the physical document responsive to the projector coordinates. Robinson does not teach use foil coordinates or an opto-touch foil because Robinson uses a camera-projector system to read input from the user and display feedback to the user. Robinson teaches the consideration of a touch foil alternate position sensing system in section 5. Thompson teaches a transparent organic LED (TOLED) display for presenting feedback to a user in the abstract and fig. 2. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined the teachings of Thompson and Robinson to have created the claimed invention. It would have been obvious and desirable to have used the touch foil taught by Robinson and the TOLED of Thompson to have improved Robinson so that the position could have been sensed and feedback presented to the user without the user's hand or input pen interfering with either the sight of the input camera or the projection of the feedback projector of Robinson.

Regarding dependent claim 36, Robinson teaches responsive to a first location of the plurality of locations being selected in the electronic document, sending the coordinates of the first location to the camera-projector system to cause an animation, which could be a blinking of

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light, at a first position upon the DigitalDesk corresponding to where the first location appears in the physical document in sections 3, 4.3, and 5.

Regarding dependent claim 37, Robinson does not teach use of an opto-touch foil because Robinson uses a camera-projector system to read input from the user and display feedback to the user. Robinson teaches the consideration of a touch foil alternate position sensing system in section 5. Thompson teaches a transparent organic LED (TOLED) display for presenting feedback to a user in the abstract and fig. 2. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined the teachings of Thompson and Robinson to have created the claimed invention. It would have been obvious and desirable to have used the touch foil teaching of Robinson and the TOLED of Thompson to have improved Robinson so that the position could have been sensed and feedback presented to the user without the user's hand or input pen interfering with either the sight of the input camera or the projection of the feedback projector of Robinson.

Regarding dependent claim 38, Robinson teaches responsive to the DigitalDesk being activated at a first position corresponding to where a first location of the plurality of locations appears in the physical document, causing an animation, which could be a blinking of light, at the first position and highlighting the first position in the electronic document in sections 3, 4.3, and 5.

Response to Arguments

Applicant's arguments filed 7/18/2005 have been fully considered but they are not persuasive. Regarding Applicant's argument in pages 12-14 that Robinson does not teach that the electronic document is not derived from the physical document, the Examiner respectfully disagrees. In section 4.1 Robinson teaches that the electronic document may be created in two ways. One way is that the animated documents are created with a fairly conventional WYSIWYG editor. Thus, Robinson is teaching that electronic document is created using an electronic software document creation and editing program and is not derived from a physical document. Robinson teaches in the last sentence of section 4.1 that text and pictures can be copied from conventional printed documents by using the overhead camera to capture an image and passing any text through an optical character recognition system. Thus, Robinson can create electronic documents derived from physical documents, however as previously noted by the Examiner this is not the only method of creating electronic documents in the Robinson system. Thus, since Robinson teaches creating electronic documents either derived or not derived from physical documents, the Examiner believes Robinson teaches this amended claim limitation.

Additionally, upon furthered consideration of the prior art teachings of Robinson, the Examiner realizes that in the third paragraph of section 5, Robinson discusses the consideration of using a conventional graphics tablet, or touch foil, however Robinson does not specifically use the touch foil for the reason that a light pen and camera has the advantage that it works perfectly well over a stack of paper on the desk. Furthermore, the Examiner realizes a camera would still be needed in the Robinson system to perform optical character recognition for deriving electronic documents from physical documents, which is a feature not concerning the claimed

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invention. Since Robinson considers the use and benefit of a touch foil, the touch foil teaching of Moran is not actually needed to teach the claimed invention and therefore the Examiner no longer uses the Moran reference in this office action.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Arai et al., "PaperLink: a technique for hyperlinking from real paper to electronic content", Proceedings of the SIGCHI conference on Human Factors in computing systems, published by ACM Press, March 1997, pages 327-334 discloses augmenting paper documents such that a user can make marks on paper which can have associations and meaning in an electronic world. Newman et al., "A Desk Supporting Computer-based Interaction with Paper Documents", Proceedings of the SIGCHI conference on Human Factors in computing systems, published by ACM Press, May 1992, pages 587-592 discloses a desk which enables people to interact with ordinary paper documents in ways normally possible only with electronic documents. Grasso et al., "Augmenting Paper to Enhance Community Information Sharing", Proceedings of DARE 2000 on Designing augmented reality environments, published by ACM Press, April 2000, pages 51-62 discloses an augmented paper interface to electronic information. McGee et al., US 6,674,426 B1 provisional filed 3/10/2000 discloses augmenting and not replacing paper based work practice via multi-modal interaction. Dymetman et al., US 6,752,217 B2 continuation of application filed 3/25/1999 discloses a marking medium area with an encoded identifier for producing an action through a network.

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7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter J. Smith whose telephone number is 571-272-4101. The examiner can normally be reached on Mondays-Fridays 7:00am-3:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather R. Herndon can be reached on 571-272-4136. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

PJS

9/26/2005


HEATHER R. HERNDON
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100